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09/539,491	03/30/2000	Gaetano Bonfiglio	Q00-1056-US1	8411
7590 06/15/2004		EXAMINER		
David M Sigmond			TRAN, THAI Q	
Maxtor Corporation 2452 Clover Basin Drive			ART UNIT	PAPER NUMBER
Longmont, CO 80503			2615	10
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	09/539,491	BONFIGLIO ET AL.	
Office Action Summary	Examiner	Art Unit	
	Thai Tran	0045	
The MAILING DATE of this communication ap	opears on the cover sheet v	with the correspondence address -	
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). Status	LY IS SET TO EXPIRE 3 No. 136(a). In no event, however, may a poly within the statutory minimum of this will apply and will expire SIX (6) MO.	MONTH(S) FROM reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this computation	
1) Responsive to communication(s) filed on 31 N			
2a) ☐ This action is FINAL . 2b) ☐ This	s action is non-final.		
3) Since this application is in condition for allowa	nce except for formal mat	ters, prosecution as to the merits	is
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D). 11, 453 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1-120 is/are pending in the application	n		
4a) Of the above claim(s) is/are withdray	III.		
5) Claim(s) <u>1-5,11-15,21-35,41-50,61-70 and 81-</u>	410 islara allawad		
6) Claim(s) 6-10,16-20,36-40,51-60,71-80 and 11	11 120 is/ore rejected		
7) Claim(s) is/are objected to.	1-120 Is/are rejected.		
8) Claim(s) are subject to restriction and/or	r election requirement		
Application Papers	olosion requirement.		
9) The specification is objected to by the Examiner	·		
10) The drawing(s) filed on is/are: a) acce	onted or h) objected to b		
Applicant may not request that any objection to the o	traving(e) he held in above.	by the Examiner.	
Replacement drawing sheet(s) including the correction	on is required if the drawing.	ce. See 37 CFR 1.85(a).	
11) The oath or declaration is objected to by the Exa	on is required it the drawing; aminer. Note the attached	s) is objected to. See 37 CFR 1.121((d).
Priority under 35 U.S.C. § 119	anniner. Note the attached	Office Action or form PTO-152.	
12) Acknowledgment is made of a claim for foreign p a) All b) Some * c) None of:		119(a)-(d) or (f).	
1. Certified copies of the priority documents	have been received.		
2. Certified copies of the priority documents	have been received in An	plication No	
or the priorit	ty documents have been r	eceived in this National Stage	
application from the international Bureau	(PCT Rule 17 2/a))		
* See the attached detailed Office action for a list o	f the certified copies not re	eceived.	
ttachment(s)			
Notice of References Cited (PTO-892)			
Notice of Draftsperson's Patent Drawing Review (DTO 048)	4) Interview Sur	mmary (PTO-413) Mail Date	
I Infance to my	• apoi 140(3)//	Mail Date	
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Info 6) Other:	ormal Patent Application (PTO-152)	

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed April 01, 2004 have been fully considered but they are not persuasive.

In re pages 24-26, applicants argue, with respect to claims 6-7 and 16-17, that Sugimura et al not only fails to teach or suggest removing the storage timing field that carrier the first or second time stamps and wish to emphasizes that claim 6 recites removing the storage timing field that includes the given first timing information, rather than merely removing the given first timing information.

In response, the examiner respectfully disagrees. First at all, Sugimura et al teaches that recording area is considered "recording field" (see col. 6, lines 45-65) and, as recognized by applicants, that Sugimura et al teaches the replacing of the first time (time stamp area) stamp with the second time stamp (time stamp area). When the first time stamp is replaced with the second time stamp, the area of the first time stamp is removed and the area of the second time stamp is added. Thus, Sugimura et al does indeed disclose the claimed "removing the storage timing field" as recited in claims 6 and 16.

In re page 26, applicants state that the rejection of claims 8-10 and 18-20 is moot for the reasons set forth above for claims 6 and 16.

In response, as discussed above with respect to claims 6 and 16, Sugimura et al discloses all the claimed limitations of claims 6 and 16.

In re pages 27, applicants state that the rejection of claims 36-37 should be withdrawn for the reasons set forth above for claim 6.

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In response, as discussed above with respect to claim 6, Sugimura et al discloses all the claimed limitations of claim 6.

In re page 27, applicants state that the rejection of claims 38-40 is moot for the reasons set forth above for claim 36.

In response, as discussed above with respect to claims 6 and 36, Sugimura et al discloses all the claimed limitations of claims 6 and 36.

Drawings

2. Changes to the drawings filed March 31, 2004 have been approved by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 6-7, 51, 54-56, 59, 16-17, 71, 74-76, and 79 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugimura et al (US 6,519,411 B1) as set forth in the last Office Action.

Regarding claim 6, Sugimura et al discloses a method for retrieving multimedia information stored on a recording medium (Fig. 1 and col. 6, lines 45-62), comprising:

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reading a signal recorded on the medium, the signal representing encoded packets of multimedia information, a respective corresponding encoded packet including a given first timing information in a storage timing field (col. 16, lines 6-13 and 40-47);

comparing the given first timing information in the storage timing field to a timing value from a timing generator (col. 16, lines 40-47); and

removing the given storage timing field from the respective corresponding encoded packet and outputting the respective corresponding encoded packet to a decoder when the act of comparing indicates that a respective transmission time has been reached (switching circuit 2304 of Fig. 23, col. 15, lines 50-62 and col. 17, lines 47-61).

Regarding claim 7, Sugimura et al also discloses the claimed wherein the respective transmission time is a time which is a predetermined time period earlier than a time indicated by the first timing information (col. 16, lines 40-64).

Regarding claim 51, the claimed wherein the encoded packets are read in a first in, first out manner is met by the magnetic tape 116 of Sugimura et al (col. 6, lines 10-13) because the magnetic tape is first in first out storage device.

Regarding claim 54, the claimed wherein the storage timing field is appended to the beginning of the respective corresponding encoded packet is met by the time stamp 25 of Fig. 10 (col. 8, lines 41-49).

Regarding claim 55, Sugimura et al also discloses the claimed wherein the multimedia information includes video content (col. 6, lines 58-62).

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Regarding claim 56, Sugimura et al discloses the claimed wherein the multimedia information includes audio content (col. 6, lines 45-50).

Regarding claim 59, Sugimura et al discloses the claimed wherein the medium is a magnetic tape (col. 6, lines 10-13).

Apparatus claims 16-17, 71, 74-76, and 79 are rejected for the same reasons as discussed in the corresponding method claims 6-7, 51, 54-56, and 59 above.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 57-58, 60, 77-78, and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimura et al (US 6,519,411 B1).



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Regarding claim 57, Sugimura et al discloses all the claimed limitations as discussed in claim 6 above except for providing that the medium is a hard disk.

Sugimura et al teaches in col. 22, lines 41-48 that "The present invention, however, is not limited to the magnetic recording and reproduction apparatus but is also applicable to an apparatus for recording and reproducing digital signals on a disk such as a magneto-optical disk with equal effect. Also, the invention is of course applicable to a recording medium having no driver such as a semiconductor memory, and thus can be realizable with any recording medium".

It is noted that hard disk is old and well known in the art and, therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known hard disk into Sugimura et al's system since it merely amounts to selecting different recording medium because Sugimura et al teaches that different recording medium can be used.

Regarding claim 58, Sugimura et al discloses all the claimed limitations as discussed in claim 6 above except for providing that the medium is an optical disk.

Sugimura et al teaches in col. 22, lines 41-48 that "The present invention, however, is not limited to the magnetic recording and reproduction apparatus but is also applicable to an apparatus for recording and reproducing digital signals on a disk such as a magneto-optical disk with equal effect. Also, the invention is of course applicable to a recording medium having no driver such as a semiconductor memory, and thus can be realizable with any recording medium".





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it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the optical disk such as magneto-optical disk into Sugimura et al's system since it merely amounts to selecting different recording medium because Sugimura et al teaches that different recording medium can be used.

Regarding claim 60, Sugimura et al discloses all the claimed limitations as discussed in claim 6 above except for providing that the medium is a writable CD.

Sugimura et al teaches in col. 22, lines 41-48 that "The present invention, however, is not limited to the magnetic recording and reproduction apparatus but is also applicable to an apparatus for recording and reproducing digital signals on a disk such as a magneto-optical disk with equal effect. Also, the invention is of course applicable to a recording medium having no driver such as a semiconductor memory, and thus can be realizable with any recording medium".

It is noted that writable CD is old and well known in the art and, therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known writable CD into Sugimura et al's system since it merely amounts to selecting different recording medium because Sugimura et al teaches that different recording medium can be used.

Apparatus claims 77-78 and 80 are rejected for the same reasons as discussed in corresponding method claims 57-58 and 60 above.

7. Claims 8-10, 52-53, 18-20, and 72-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimura et al (US 6,519,411 B1) in view of Lane (US 6,031,960).

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Regarding claim 8, Sugimura et al discloses all the features of the instant invention as discussed in claim 6 above except for providing the claimed wherein a first subset of the encoded packets include second timing information outside of the storage timing field, and a second subset of the encoded packets exclude second timing information outside of the storage timing field.

Lane teaches that MPEG-2 System layer has several timing information outside of the storage timing field such as program cock reference (PCR), presentation time stamp (PTS), and decoding time stamp (DTS). See col. 1, lines 41-60.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the MPEG-2 encoder/decoder as taught in Lane into Sugimura et al in order to increase the storage capacity of the recording medium of Sugimura et al because MPEG-2 encoder/decoder has high compression ratio.

Regarding claim 9, Lane discloses the claimed wherein the encoded packet output to the decoder is in a MPEG2 format (col. 1, line 61 to col. 2, line 16).

Regarding claim 10, Lane further discloses the claimed wherein the storage timing field includes a 42 bit timing value (33 bit register and 9 bit extension disclosed in col. 7, lines 61-67).

Regarding claim 52, the claimed wherein the first subset of the encoded packets include a program clock reference field that carries the given first timing information is met by the PCR of Lane (col. 1, lines 41-60), and the second subset of the encoded packets exclude a program clock reference field that carries the give first timing information is met by the PAS and DTS of Lane (col. 1, lines 41-60).

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Regarding claim 53, the claimed wherein the given first timing information is identical to the second timing information is met by the time stamp in the input signal and another time stamp supplied from the time stamp generator 107 disclosed in col. 13, lines 8-16 of Sugimura et al.

Method claims 18-20 and 72-73 are rejected for the same reasons as discussed in apparatus claims 8-10 and 52-53 above.

8. Claims 36-37, 111, and 114-120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimura et al (US 6,519,411 B1) in view of Kato (US 6,404,711 B1).

Regarding claim 36, Sugimura et al discloses all the claimed limitations as discussed in claim 6 above except for providing a machine-readable medium having recorded therein machine-readable information, such that when the machine-readable information is read and executed by a processor within a storage device for performing the method of claim 6 above.

Kato teaches that a computer executes a program stored in a presentation medium can be used to control the digital video recorder/reproducer (col. 10, lines 45-50).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the computer as taught by Kato into Sugimura et al's system in order to facilitate the capability of controlling the digital video recorder of Sugimura et al.

Regarding claim 37, Sugimura et al also discloses the claimed wherein the respective transmission time is a time which is a predetermined time period earlier than a time indicated by the first timing information (col. 16, lines 40-64).





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Regarding claim 111, the claimed wherein the encoded packets are read in a first in, first out manner is met by the magnetic tape 116 of Sugimura et al (col. 6, lines 10-13) because the magnetic tape is first in first out storage device.

Regarding claim 114, the claimed wherein the storage timing field is appended to the beginning of the respective corresponding encoded packet is met by the time stamp 25 of Fig. 10 (col. 8, lines 41-49).

Regarding claim 115, Sugimura et al also discloses the claimed wherein the multimedia information includes video content (col. 6, lines 58-62).

Regarding claim 116, Sugimura et al discloses the claimed wherein the multimedia information includes audio content (col. 6, lines 45-50).

Regarding claim 117, the combination of Sugimura et al and Kato discloses all the claimed limitations as discussed in claim 36 above except for providing that the medium is a hard disk.

Sugimura et al teaches in col. 22, lines 41-48 that "The present invention, however, is not limited to the magnetic recording and reproduction apparatus but is also applicable to an apparatus for recording and reproducing digital signals on a disk such as a magneto-optical disk with equal effect. Also, the invention is of course applicable to a recording medium having no driver such as a semiconductor memory, and thus can be realizable with any recording medium".

It is noted that hard disk is old and well known in the art and, therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known hard disk into Sugimura et al's system since it merely



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amounts to selecting different recording medium because Sugimura et al teaches that different recording medium can be used.

Regarding claim 118, the combination of Sugimura et al and Kato discloses all the claimed limitations as discussed in claim 36 above except for providing that the medium is an optical disk.

Sugimura et al teaches in col. 22, lines 41-48 that "The present invention, however, is not limited to the magnetic recording and reproduction apparatus but is also applicable to an apparatus for recording and reproducing digital signals on a disk such as a magneto-optical disk with equal effect. Also, the invention is of course applicable to a recording medium having no driver such as a semiconductor memory, and thus can be realizable with any recording medium".

it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the optical disk such as magneto-optical disk into Sugimura et al's system since it merely amounts to selecting different recording medium because Sugimura et al teaches that different recording medium can be used.

Regarding claim 119, Sugimura et al discloses the claimed wherein the medium is a magnetic tape (col. 6, lines 10-13).

Regarding claim 120, the combination of Sugimura et al and Kato discloses all the claimed limitations as discussed in claim 36 above except for providing that the medium is a writable CD.

Sugimura et al teaches in col. 22, lines 41-48 that "The present invention, however, is not limited to the magnetic recording and reproduction apparatus but

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is also applicable to an apparatus for recording and reproducing digital signals on a disk such as a magneto-optical disk with equal effect. Also, the invention is of course applicable to a recording medium having no driver such as a semiconductor memory, and thus can be realizable with any recording medium".

It is noted that writable CD is old and well known in the art and, therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known writable CD into Sugimura et al's system since it merely amounts to selecting different recording medium because Sugimura et al teaches that different recording medium can be used.

9. Claims 38-40 and 112-113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimura et al (US 6,519,411 B1) in view of Kato (US 6,404,711 B1) as applied to claim 36 above, and further in view of Lane (US 6,031,960).

Regarding claim 38, the combination of Sugimura et al and Kato discloses all the claimed limitations as discussed in claim 36 above except for providing the claimed wherein a subset of the encoded packet include second timing information outside of the storage timing field.

Lane teaches that MPEG-2 System layer has several timing information outside of the storage timing field such as program cock reference (PCR), presentation time stam0p (PTS), and decoding time stamp (DTS). See col. 1, lines 41-60.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the MPEG-2 encoder/decoder as taught in Lane into Sugimura



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et al in order to increase the storage capacity of the recording medium of Sugimura et al because MPEG-2 encoder/decoder has high compression ratio.

Regarding claim 9, Lane discloses the claimed wherein the encoded packet output to the decoder is in a MPEG2 format (col. 1, line 61 to col. 2, line 16).

Regarding claim 10, Lane further discloses the claimed wherein the storage timing field includes a 42 bit timing value (33 bit register and 9 bit extension disclosed in col. 7, lines 61-67).

Regarding claim 112, the claimed wherein the first subset of the encoded packets include a program clock reference field that carries the given first timing information is met by the PCR of Lane (col. 1, lines 41-60), and the second subset of the encoded packets exclude a program clock reference field that carries the give first timing information is met by the PAS and DTS of Lane (col. 1, lines 41-60).

Regarding claim 113, the claimed wherein the given first timing information is identical to the second timing information is met by the time stamp in the input signal and another time stamp supplied from the time stamp generator 107 disclosed in col. 13, lines 8-16 of Sugimura et al.

Allowable Subject Matter

- 10. Claims 1-5, 11-15, 21-35, 41-50, 61-70, and 81-110 are allowed.
- 11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the 12. examiner should be directed to Thai Tran whose telephone number is (703) 305-4725. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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